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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

1 of 9

Complete If Known

Application Number	10/659,992
Filing Date	9/10/2003
First Named Inventor	A. Paul Alivisatos
Art Unit	
Examiner Name	

Attorney Docket Number

IB-1830

U.S. PATENT DOCUMENTS

Examiner	Cite No.	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	4,625,071	11/25/1986	Delahoy, et al.	
	2	5,331,183	07/19/1994	Sariciftci, et al.	
	3	5,350,459	09/27/1994	Suzuki, et al.	
	4	5,350,644	09/27/1994	Graetzl, et al.	
	5	5,454,880	10/03/1995	Sariciftci, et al.	
	6	5,504,323	04/02/1996	Heeger, et al.	
	7	5,523,555	06/04/1996	Friend, et al.	
	8	5,525,440	06/11/1996	Kay, et al.	
	9	5,670,791	09/23/1997	Friend, et al.	
	10	5,698,048	12/16/1997	Halls, et al.	
	11	5,804,836	09/08/1998	Heeger, et al.	
	12	6,013,871	01/11/2000	Curtin	
	13	5,262,357	11/16/1993	Alivisatos, et al.	
	14	5,505,928	04/09/1996	Alivisatos, et al.	
	15	5,537,000	07/16/1996	Alivisatos, et al.	
	16	5,751,018	05/12/1998	Alivisatos, et al.	
	17	5,990,479	11/23/1999	Weiss, et al.	
	18	6,207,392 B1	03/21/2001	Weiss, et al.	
	19	6,225,198 B1	05/01/2001	Alivisatos, et al.	
	20	6,306,736 B1	10/23/2001	Alivisatos, et al.	
	21	6,423,551 B1	07/23/2002	Weiss, et al.	
	22	6,440,213 B1	08/27/2002	Alivisatos, et al.	
	23	6,277,740 B1	08/21/2001	Goldstein	
	24	6,239,355 B1	05/29/2001	Salafsky	
	25	2002/0006723 A1	01/17/2002	Goldstein	
	26	2002/0016306 A1	02/07/2002	Hutchison, et al.	

FOREIGN PATENT DOCUMENTS

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	A	WO 99/25028 A1	06/20/1999	PCT		

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<i>(initials)</i>	27	SCHLAMP, et al., <i>Journal of Applied Physics</i> , Volume 82, No. 11, pp. 5837- 5842, (December 1997)		
	28	SIRRINGHAUS, et al., <i>Science</i> , Volume 280, pp. 1741-1744, (June 1998)		
	29	PENG, et al., <i>Journal of the American Chemical Society</i> , Volume 123, pp. 183-184, (December 2001)		
	30	MANNA, et al., <i>Journal of the American Chemical Society</i> , Volume 122, pp. 12700-12706, (December 2000)		
	31	SHAHEEN, et al., <i>Applied Physics Letters</i> , Volume 78, Number 6, pp. 841-843, (February 2001)		
	32	DITTMER, et al., <i>Advanced Materials</i> , Volume 12, Number 17, pp. 1270-1274, (September 2000)		
	33	ARANGO, et al., <i>Advanced Materials</i> , Volume 12, Number 22, pp. 1689-1692, (November 2000)		
	34	ALIVISATOS, <i>Science</i> , Volume 271, pp. 933-936, (February 1996)		
	35	WINIARZ, et al., <i>Chemical Physics</i> , Volume 245, pp. 417-428, (January 1999)		
	36	SCHMIDT-MENDE et al., <i>Reports</i> , (June 2001)		
	37	YU, et al., <i>Journal of Applied Physics</i> , Volume 78, No. 7, pp. 4510-4515, (October 1995)		
	38	HALLS, et al., <i>Nature</i> , Volume 376, p. 498-500, (August 1995)		
<i>(initials)</i>	39	SCHON, et al., <i>Nature</i> , Volume 403, pp. 408-410, (January 2000)		

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<i>Q</i>	40	ROMAN, et al., <i>Advanced Materials</i> , Volume 9, Number 15, pp. 1164-1168, (January 1997)	
	41	ROMAN, et al., <i>Advanced Materials</i> , Volume 10, Number 10, pp. 774-777, (January 1998)	
	42	GRANSTROM, et al., <i>Synthetic Metals</i> , Volume 102, pp. 957-958, (January 1999)	
	43	GAO, et al., <i>Advanced Materials</i> , Volume 10, Number 9, pp. 692-695, (January 1998)	
	44	ZHANG, et al., <i>Advanced Materials</i> , Volume 13, Number 24, pp. 1871-1874, (December 2001)	
	45	HIRAMOTO, et al., <i>Applied Physics Letters</i> , Volume 73, Number 18, pp. 2627-2629, (November 1998)	
	46	ABDOU, et al., <i>Journal of the American Chemical Society</i> , Volume 119, pp. 4518-4524, (January 1997)	
	47	HALLS, et al., <i>Physical Review B</i> , Volume 60, Number 8, pp. 5721-5726, (August 1999)	
	48	YU, et al., <i>Applied Physics Letters</i> , Volume 64, Number 25, (June 1994)	
	49	YU, et al., <i>Applied Physics Letters</i> , Volume 64, Number 12, pp. 1540-1542, (March 1994)	
	50	TANG, <i>Applied Physics Letters</i> , Volume 48, Number 2, pp. 183-185, (January 1986)	
	51	HALLS, et al., <i>Applied Physics Letters</i> , Volume 68, Number 22, pp. 3120-3122, (May 1996)	
<i>Q</i>	52	PARK, et al., <i>Synthetic Metals</i> , Volume 79, pp. 177-181, (January 1996)	

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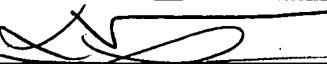
First Named Inventor A. Paul Alivisatos

Art Unit

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✓	53	YOSHINO, et al., <i>IEEE Transactions on Electron Devices</i> , Volume 44, Number 8, (August 1997)	
	54	HARRISON, et al., <i>Physical Review B</i> , Volume 55, Number 12, pp. 7831-7849, (March 1997)	
	55	GAO, et al., <i>Synthetic Metals</i> , Volume 84, pp. 979-980, (January 1997)	
	56	TADA, et al., <i>Japanese Journal of Applied Physics</i> , Volume 36, Part 2, Number 3A, pp. L306-L309, (March 1997)	
	57	TADA, et al., <i>Synthetic Metals</i> , Volume 85, pp. 1305-1306, (January 1997)	
	58	KOHLER, <i>Nature</i> , Volume 392, p. 903-906, (April 1998)	
	59	GINGER, et al., <i>Applied Physics Letters</i> , Volume 59, Number 16, pp. 10622-10629, (April 1999)	
	60	SHARMA, et al., <i>Optical Materials</i> , Volume 13, pp. 261-265, (January 1999)	
	61	KASAM, <i>Journal of Materials Science</i> , Volume 34, pp. 5237-5242, (January 1999)	
	62	OUALI, et al., "Oligo(phenylenevinylene)/Fullerene Photovoltaic Cells: Influence of Morphology", <i>Advanced Materials</i> (July 1999)	
	63	CHARTIER et al., <i>Solar Energy Materials & Solar Cells</i> , Volume 52, pp. 413-421, (January 1998)	
	64	GREENHAM, et al., <i>Physical Review B</i> , Volume 54, Number 24, pp. 17628-17637, (December 1996)	
✓	65	PENG, "High Quality Inorganic Semiconductor Nanocrystals for New Solar Cells", pp. 1-8	

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<i>✓</i>	66	ZABAN et al., <i>Langmuir</i> , Volume 14, pp. 3153-3156, (May 1998)	
	67	GRATZEL, <i>MRS Bulletin</i> , pp. 61-66, (October 1993)	
	68	LI, et al., <i>Synthetic Metals</i> , Volume 94, pp. 273-277, (January 1998)	
	69	KAVAN, et al., <i>Journal of Physical Chemistry</i> , Volume 97, pp. 9493-9498, (June 1993)	
	70	NAZEERUDDIN, et al. <i>Journal of the American Chemical Society</i> , Volume 115, pp. 6382-6390, (January 1993)	
	71	HUANG, et al., <i>Journal of Physical Chemistry B</i> , Volume 101, pp. 2576-2582, (March 1997)	
	72	BACH, et al., <i>Nature</i> , Volume 395, pp. 583-585, (October 1998)	
	73	SMESTAD, et al., <i>Journal of Chemical Education</i> , Volume 75, Number 6, pp. 752-756, (June 1998)	
	74	VOGEL, et al., <i>Journal of the American Chemical Society</i> , Volume 98, pp. 3183-3188, (February 1994)	
	75	O'REGAN, et al., <i>Nature</i> , Volume 353, pp. 737-740, (October 1991)	
	76	GRANSTROM, et al., <i>Nature</i> , Volume 395, pp. 257-260, (September 1998)	
	77	MARKS, et al., <i>J. Phys.: Condens. Matter</i> , Volume 6, pp. 1379-1393, (June 1994)	
<i>✓</i>	78	PETRITSCH, et al., <i>Solar Energy Materials & Solar Cells</i> , Volume 61, pp. 63-72, (January 2000)	

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	79	DITTMER, et al., <i>Solar Energy Materials & Solar Cells</i> , Volume 61, pp. 53-61, (January 2000)	
	80	KRASNIKOV, et al., <i>Department of Polymer Chemistry, Materials Science Centre, University of Groningen: Infosheet 'Interpenetrating Morphologies for Photovoltaic Devices'</i>	
	81	HALLS, et al., <i>Synthetic Metals</i> , Volume 85, pp. 1307-1308, (January 1997)	
	82	ROMAN, et al., <i>Advanced Materials</i> , "Trapping Light in Polymer Photodiodes with Soft Embossed Gratings" (January 2000)	
	83	YU, et al., <i>Science</i> , Volume 270, pp. 1789-1791, (December 1995)	
	84	HUYNH, "Nanocrystal-Polymer Solar Cells", (May 2002) Dissertation U.C. Berkeley Chemistry Department	
	85	AHMADI, et al., <i>Science</i> , Volume 272, pp. 1924-1926, (June 1996)	
	86	ALIVISATOS, <i>Journal of Physical Chemistry</i> , Volume 100, pp. 13226-13239, (March 1996)	
	87	ATAEV, et al., <i>Tech. Phys. Lett.</i> , Volume 23, Number 11, pp. 842-843, (November 1997)	
	88	BANDARANAYAKE, et al., <i>Applied Physics Letters</i> , Volume 67, Number 6, pp. 831-833, (August 1995)	
	89	BERMAN, et al., <i>Science</i> , Volume 269, pp. 515-518, (July 1995)	
	90	CHANG, et al., <i>Langmuir</i> , Volume 15, pp. 701-709, (December 1999)	
	91	CHEMSEDDINE, et al., <i>Eur. J. Inorg. Chem.</i> , pp. 235-245, (January 1999)	

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X	92	CHEN, et al., <i>Chem. Mater.</i> , Volume 12, pp. 1516-1518, (May 2000)	
	93	CHO, <i>Journal of Crystal Growth</i> , 201-202, pp. 1-7, (January 1999)	
	94	CUI, et al., <i>Science</i> , Volume 293, pp. 1289-1292, (August 2001)	
	95	DAI, et al., <i>Chemical Physics Letters</i> , Volume 358, pp. 83-86, (May 2002)	
	96	HOLMES, et al., <i>Science</i> , Volume 287, pp. 1471-1473, (February 2000)	
	97	HU, et al., <i>Accounts of Chemical Research</i> , Volume 32, Number 5, pp. 435-445, (February 1999)	
	98	HUYNH, et al., <i>Advanced Materials</i> , Volume 11, Number 11, pp. 923-927, (November 1999)	
	99	HUYNH, et al., <i>Science</i> , Volume 295, pp. 2425-2427, (March 2002)	
	100	ITO, <i>Japanese Journal of Applied Physics</i> , Volume 37, Part 2, Number 10B, pp. L1217-L1220, (September 1998)	
	101	JIN, et al., <i>Science</i> , Volume 294, pp. 1901-1903, (November 2001)	
	102	JUN, et al., <i>Journal of the American Chemical Society</i> , Volume 123, pp. 5150-5151, (May 2001)	
	103	LEON, et al., <i>Science</i> , Volume 267, pp. 1966-1968, (March 1995)	
X	104	LI, et al., <i>Nature</i> , Volume 402, pp. 393-395, (November 1999)	

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	106	LIU, et al., <i>Physical Review Letters</i> , Volume 84, Number 9, pp. 1958-1961, (February 2000)	
	107	MEWS, et al., <i>Physical Review B</i> , Volume 53, Number 20, pp. R13 242-R13 245, (May 1996)	
	108	MURRAY, et al., <i>Journal of the American Chemical Society</i> , pp. 8706-8715, (January 1993)	
	109	NI, et al., <i>Chem. Mater.</i> , Volume 14, pp. 1048-1052, (February 2002)	
	110	PARK, et al., <i>Physical Review B</i> , Volume 49, Number 7, pp. 4485-4493, (February 1994)	
	111	PARK, et al., <i>Journal of the American Chemical Society</i> , Volume 122, pp. 8581-8582, (August 2000)	
	112	PAUL, <i>Advanced Materials</i> , Volume 11, Number 3, pp. 191-204, (January 1999)	
	113	PENG, et al., <i>Journal of the American Chemical Society</i> , Volume 120, pp. 5343-5344, (May 1998)	
	114	PENG, et al., <i>Journal of the American Chemical Society</i> , Volume 124, pp. 3343-3353, (January 2002)	
	115	PENG, et al., <i>Nature</i> , Volume 404, pp. 59-61, (March 2000)	
	116	PENN, et al., <i>Science</i> , Volume 281, pp. 969-971, (August 1998)	
	117	QI, et al., <i>Journal of Physical Chemistry B</i> , Volume 101, pp. 3460-3463, (April 1997)	
	118	REES, et al., <i>Langmuir</i> , Volume 15, pp. 1993-2002, (February 1999)	

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Date Considered

03/06

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Application Number	10/659,992
Filing Date	9/10/2003
First Named Inventor	A. Paul Alivisatos
Art Unit	
Examiner Name	

Attorney Docket Number

IB-1830

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
<i>✓</i>	119	SATOH, et al., <i>Japanese Journal of Applied Physics</i> , Volume 38, Part 2, Number 5B, pp. L586-L589, (May 1999)	
	120	SHEVCHENKO, et al., <i>Advanced Materials</i> , Volume 14, Number 4, pp. 287-290, (February 2002)	
	121	SMALLEY, et al., <i>Solid State Communications</i> , Volume 107, Number 11, pp.597-608, (January 1998)	
	122	TANORI, et al., <i>Langmuir</i> , Volume 13, pp. 639-646, (January 1997)	
	123	TRENTLER, et al., <i>Science</i> , Volume 270, pp. 1791-1794, (December 1995)	
	124	WANG, et al., <i>Science</i> , Volume 293, pp. 1455-1457, (August 2001)	
	125	YEH, et al., <i>Physical Review B</i> , Volume 45, Number 20, pp. 12 130 - 12 133, (May 1992)	
	126	YEH, et al., <i>Physical Review B</i> , Volume 46, Number 16, pp. 10 086-10 097, (October 1992)	
	127	YU, et al., <i>The Journal of Physical Chemistry B</i> , Volume 101, Number 34, pp. 6661-6664, (August 1997)	
	128	ZHOU, et al., <i>Materials Research Bulletin</i> , Volume 34, Numbers 10/11, pp. 1563-1567, (January 1999)	
	129	ZHOU, et al., <i>Journal of Applied Polymer Science</i> , Volume 80, pp. 1520-1525, (January 2001)	
	130	CERULLO, et al, <i>In: Summaries of Papers at the Quantum and Laser Science Conference, QELS '96</i> . New York: IEEE, pp. 167-168, 2-7 June 1996	

Examiner Signature	<i>✓</i>	Date Considered	03/06
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